

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

53. (New) An implant for use in a surgical procedure, said implant comprising a metal substrate and a surface layer integral with said metal substrate, said surface layer comprising an anodized layer grown from the metal of said metal substrate by anodizing, said surface layer incorporating a biocidal metal in an ionic form, the biocidal metal ions being adsorbed into said surface layer by ion exchange, and the quantity of biocidal metal ions being such that the biocidal material is effective in suppressing infection after the surgical procedure, wherein said biocidal metal ions are silver ions, and wherein the concentration of said silver is equivalent to an average surface loading of $73 \mu\text{g}/\text{cm}^2$.

54. (New) An implant as claimed in claim 53 wherein said surface layer comprises a metal phosphate.

55. (New) An implant as claimed in claim 54 wherein the surface of said implant is in a highly polished condition before provision of said surface layer.

56. (New) An implant as claimed in claim 53 wherein the surface of said implant is in a highly polished condition before provision of said surface layer.

57. (New) An implant as claimed in claim 53 wherein the biocidal material adsorbed into said surface layer is effective in suppressing infection for at least 6 weeks after the surgical procedure.

58. (New) An implant for use in a surgical procedure, said implant comprising a metal substrate and a surface layer integral with said metal substrate, said surface layer comprising an anodized layer containing material selected from the group consisting of oxide, and phosphate, and being grown from the metal of said metal substrate by anodizing, wherein said anodized layer incorporates a biocidal metal adsorbed by ion exchange into said surface layer, and the quantity of biocidal metal ions being such that the biocidal material is effective in suppressing infection after

the surgical procedure, wherein said biocidal metal ions are silver ions, and wherein the concentration of said silver is equivalent to an average surface loading of $73 \mu\text{g}/\text{cm}^2$.

59. (New) An implant as claimed in claim 58 wherein said surface layer comprises a metal phosphate.

60. (New) An implant as claimed in claim 59 wherein the surface of said implant is in a highly polished condition before provision of said surface layer.

61. (New) An implant as claimed in 58 wherein the surface of said implant is in a highly polished condition before provision of said surface layer.

62. (New) An implant as claimed in claim 58 wherein the biocidal material adsorbed into said surface layer is effective in suppressing infection for at least 6 weeks after the surgical procedure.

63. (New) An implant for use in a surgical procedure, said implant comprising a metal substrate and a surface layer integral with said metal substrate, said surface layer comprising a material selected from the group consisting of oxide, and phosphate, said surface layer further comprising an anodized layer grown from the metal of said metal substrate by anodizing and incorporating therein a biocidal metal adsorbed by ion exchange into said surface layer, and the quantity of biocidal metal ions being such that the biocidal material is effective in suppressing infection after the surgical procedure, wherein said biocidal metal ions are silver ions, and wherein the concentration of said silver is equivalent to an average surface loading of $73 \mu\text{g}/\text{cm}^2$.

64. (New) An implant as claimed in claim 63 wherein said surface layer comprises a metal phosphate.

65. (New) An implant as claimed in claim 64 wherein the surface of said implant is in a highly polished condition before provision of said surface layer.

Appl. No. 10/501,538
Response to Office Action
Dated January 16, 2009

66. (New) An implant as claimed in claim 63 wherein the surface of said implant is in a highly polished condition before provision of said surface layer.

67. (New) An implant as claimed in claim 63 wherein the biocidal material adsorbed into said surface layer is effective in suppressing infection for at least 6 weeks after the surgical procedure.